

Contents

Summary	1
Investing in Chinese Toll Roads	1
Chinese Toll Roads	3
Chinese Toll Road Stocks	3
Jiangsu Expressway stock analysis	4
Fundamentals	5
Jiangsu Expressway company risks	9
Jiangsu shareholder risk	11
MAIN CONCERN – Concessions on toll roads expire.....	12
Growth projects estimations	13
Jiangsu stock valuation	14
Conclusion	15

Summary

This is a nice investment to look at with a good business model, growth ahead and positive structural trends. I discuss here Jiangsu Express way in detail which will be the benchmark for other investments. Those looking for a 10% to 15% return and a dividend payer could consider this a buy.

Investing in Chinese Toll Roads

Isn't an emerging market toll road a great business to invest in? It has a huge moat as nobody is going to build another road next to it and the number of cars per 1000 people and the number of traveled miles is still increasing at double digits per year, add inflation and what do you want more? On top of it, some stocks are back to August 2015 and January 2016 levels which were amazing buying opportunities.

Jiangsu Expressway Co Ltd (ADR)

OTCMKTS: JEXYY

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24,70 USD +0,50 (2,07%) ↑

7 Aug, 16:00 GMT-4 · Disclaimer

1 day 5 days 1 month 6 months YTD 1 year **5 years** Max



Open	24,53	Div yield	4,91%
High	24,70	Prev close	24,20
Low	24,53	52-wk high	32,46
Mkt cap	-	52-wk low	22,63
P/E ratio	-		

I have a very good friend who has sold more than a dozen companies in his life, he has set up his own hedge fund to have someone manage that money because he hates banks and how those banks skim people with various fees, especially if you have dozens of millions. So, my friend likes to invest in niche companies, companies with big moats, companies that you can buy and almost forget until those are overpriced and there is a better investment opportunity.

A sector he pointed towards that might be interesting for YouTube viewers and my research platform is Chinese toll roads.

A toll road is really a stable investment, probably a growth one in most geographies, especially emerging markets, prices are raised alongside inflation and the profits are easy to calculate and distribute. Further, nobody is going to build a road to compete with you.

So, let's dig into the sector, I'll share my analysis, and give a list of potential investments to moat up your portfolio. Chinese stocks are in a bear market so some fall more, some less, usually there are some irrationalities one can take advantage of.

TOPICS COVERED TODAY:

- Analysis of the sector (Chinese toll roads)
- Chinese toll road stock list
- Jiangsu Express way analysis – PV, EARNINGS, DEEP DIVE
- RISKS OF INVESTING
- Conclusion on INVESTING IN TOLL ROADS CHINA

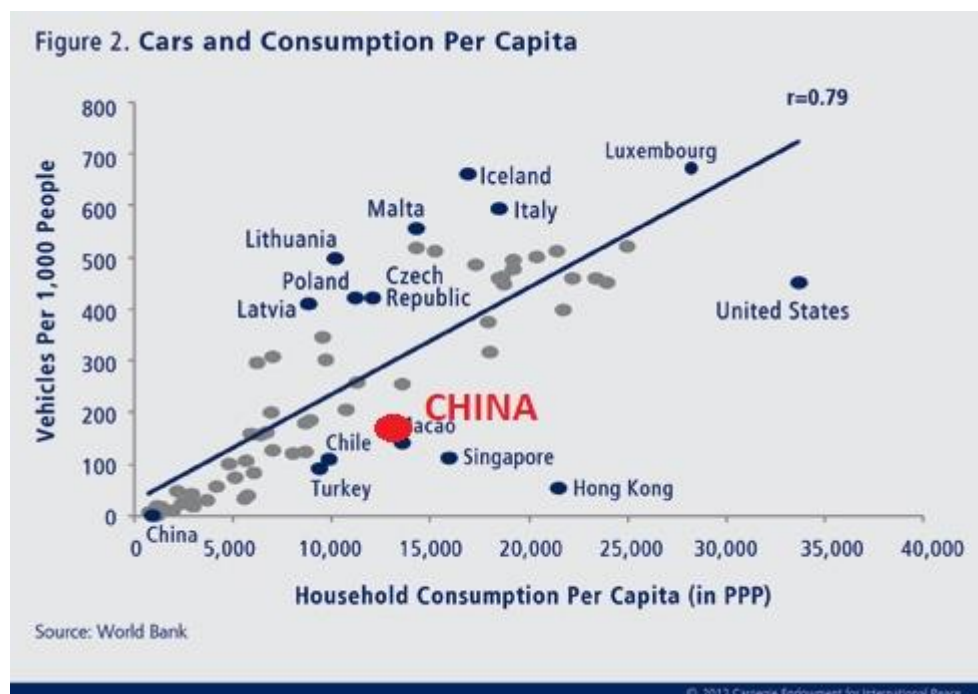
Chinese Toll Roads

China [has](#) more than 70 percent of the world's toll roads, they suffer a loss every year, but don't confuse accounting profits and cash flows. Capital intensive investments have high depreciation rates which are not a cash cost, just compensation for the initial investment that lowers taxes. Therefore, we have to look at cash flows there.

Toll roads make up less than 4 percent of China's road network, which stretches 4.5 million km (2.8 million miles).

On a macro level, things seem simple, the number of cars has been increasing in China, will probably increase a bit more and people will probably drive more.

China has 154 (2016) [motor vehicles](#) per 1000, Japan 591 and the US 910, Europe 468. Higher population density will not lead to those numbers fast but we can expect growth from more cars and more driving. Car ownership growth depends on the region but between 5% and 15% should be estimated over the next 5 years and let's put 5% afterwards.



Source: [Carnegie](#)

So, plenty of room to grow there.

Chinese Toll Road Stocks

These are some of the potential investment in Chinese toll road stocks.

Jiangsu Expressway (OTCPK:JEXYY) - \$24.2

Zhejiang Expressway (OTCPK:ZHEXY) – no data

Sichuan Expressway (OTCPK:SEXHF) - \$0.33

Anhui Expressway (OTCPK:AUHEF) - \$0.79

Shenzhen Expressway (OTC:SHZNF) - \$0.87

HUAYU Expressway (HKG: 1823) – 0.70 HKD

China Communications Construction Co. Ltd. (HKG: 1800) – 8.32 HKD

[RKE International](#) Holdings Limited (subsidiary of **RKI**, (HK: 1098) – 14.14 HKD) a Hong Kong listed property development and infrastructure conglomerate) Private Equity Firm CVC Invests \$255M In Chinese Toll Road Operator RKE.

Guangdong expressway (Shenzen: 200429, HK yes but???)_

Yuexiu Transport Infrastructure Ltd HKG 1052 HK\$ 5.88

Do not worry about the low prices of the ADR stocks – stocks in Asia have much lower prices and if the ADRs are not adjusted, you get lower prices but we are not talking about penny stocks here. Also, some of the stocks above have been around for quite a while that gives a higher degree of confidence when investing.

Let's take a look at Jiangsu Expressway which is the one I will use for further comparison.

[Jiangsu Expressway stock analysis](#)

Jiangsu Expressway (OTCPK:JEXYY - \$24.2, HKG: 0177 – HK\$9.53)

The Company established the Level I American Depositary Receipt Program which became effective from 23 December 2002, trading in the over-the-counter market in the United States of America. As at 31 December 2017, the total share capital of the Company comprised 5,037,747,500 shares with a par value of RMB1 each.

The stock price recently fell to levels seen only in January 2016 and August 2015 when the sentiment was all doom and gloom for China. Those were perfect buying opportunities, let's see if this dip is also a buying opportunity.

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P/E ratio	-		

A look at their numbers will give us a fair indication of what kind of business we are talking about.

Fundamentals

Jiangsu Expressway Co Ltd ADR Class H JEXYY

Financials

	2008-12	2009-12	2010-12	2011-12	2012-12	2013-12	2014-12	2015-12	2016-12	2017-12	TTM
Revenue CNY Mil	5,277	5,741	6,756	7,401	7,796	7,614	8,831	8,761	9,201	9,456	9,983
Gross Margin %	53.1	56.6	56.2	50.9	48.0	51.5	47.1	49.6	52.6	54.2	54.0
Operating Income CNY Mil	2,496	2,928	3,450	3,387	3,346	3,532	3,656	3,840	4,435	4,834	5,046
Operating Margin %	47.3	51.0	51.1	45.8	42.9	46.4	41.4	43.8	48.2	51.1	50.6
Net Income CNY Mil	1,554	2,011	2,484	2,430	2,333	2,708	2,228	2,507	3,346	3,588	3,726
Earnings Per Share CNY	6.16	7.98	9.86	9.65	9.26	10.75	8.84	9.95	13.28	14.24	14.79
Dividends CNY	-	-	-	7.26	-	7.18	7.69	7.72	8.07	8.37	8.37
Payout Ratio % *	-	-	-	74.4	-	70.7	73.8	60.9	82.0	55.4	56.6
Shares Mil	252	252	-	-	-	-	-	-	-	-	-
Book Value Per Share * USD	-	-	10.51	11.06	11.89	12.49	12.63	12.46	12.38	13.97	14.95
Operating Cash Flow CNY Mil	2,765	1,798	3,392	3,835	3,189	3,084	3,092	4,476	5,464	5,232	-
Cap Spending CNY Mil	-827	-275	-119	-175	-165	-241	-369	-786	-584	-7,398	-7,655
Free Cash Flow CNY Mil	1,938	1,523	3,273	3,661	3,024	2,843	2,723	3,690	4,880	-2,166	-2,492
Free Cash Flow Per Share * USD	-	-	1.96	2.42	1.92	2.06	1.66	1.71	2.85	-0.64	-
Working Capital CNY Mil	-2,979	-1,769	-1,569	-899	-1,504	-718	-191	-5,387	-2,828	-4,121	-

* Indicates calendar year-end data information

Source: Morningstar

So, revenues doubled in the last 10 years (1), great business. Gross margins (2) are 50% that leads to a high operating income (3). Deduct all the interest costs, depreciation, taxes and you get to a net profit margin (4) of around 36% which is very high, talking about a good business.

This leads to earnings per share of (5) 14.79 (all numbers Renminbi) where 56% (7) of that is pay out as dividends (6). Note that the book value (8) has been constantly rising and that the dividend payout ratio has declined as they made a big investment last year of 7 billion renminbi (9) that led to negative free cash flow (10) of 2.4 billion which is usually extremely positive and approaching 5 billion. The free cash flow is the factor to watch as depreciation, or in this case amortization but more about that later, is high when you have to invest in building a toll road. Cash flows are usually significantly higher than earnings. So, let's see at what valuation is this great business trading.

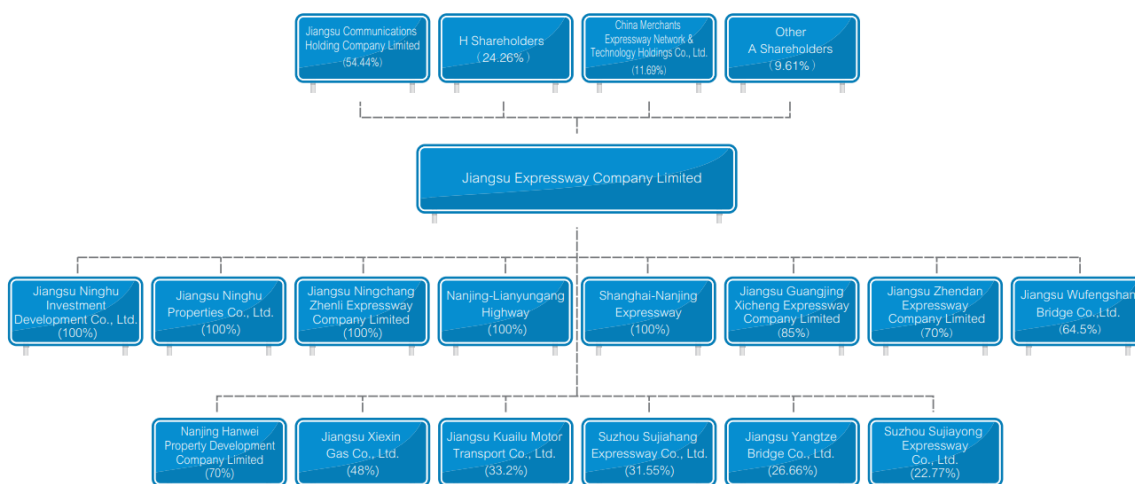
Quote	Key Ratios	Short Interest	News
Bid/Size 24.03×200	Ask/Size 24.70×100	Day Range 24.53 – 24.70	Volume / Avg 405.0 / 876.7
Year Range 22.75 – 32.46	Forward Div Yield 5.55%	Market Cap 6.2216 Bil	Investment Style Large Core
Price/Sales 4.17	Price/Earnings 11.45	Consensus Forward P/E 11.00	Price/Book 1.61

Source: [Morningstar](#)

The price to earnings ratio is 11.45, lower next year as there is growth in China, the price to book is a bit higher but don't forget about the high depreciation rates that skews the net income.

The value of the company lies in its toll roads and there are many. Some are owned 100% some are just equity stakes.

(2) Major assets structure of the Group



Source: [Jiangsu](#)

The big investment you have seen on the books is related to the Wufengshan Toll Bridge and North-South Approach Expressway projects (64%), Zhendan Expressway project (70%) and Changyi Expressway project. In addition, Guangjing Xicheng Company, a subsidiary of the Company, invested in the new construction project of Yichang Expressway projects that are expected to be finished by 2020 for a total consideration of RMB8,909 million, of which 40% is to be funded by capital and 60% is to be funded by bank loan. This should allow the company to grow in the future.

Capital expenditures by project	RMB
Investment in the construction of Zhendan Expressway	214,386,511
Investment in the construction of Wufengshan Toll Bridge	4,407,664,302
Investment in the construction of <u>Changyi Expressway</u>	1,484,729,260
Investment in the construction of Yichang Expressway	1,082,308,293
Equity investment in Suzhou Industrial Park CDB Kai Yuan Investment Center Phase II (Limited Partnership)	352,749,204
Equity investment in Nanjing Luode Dening Real Estate Investment Partnership Corporation (Limited Partnership)	75,000,000
Equity investment in Jiangsu Sundian	13,500,000
Connection and modification of Jingjiang Station of Guangjing Expressway	24,140,649
Alteration and addition of service areas and toll collection points	62,374,029
Construction project of Three Major Systems	19,610,524
Noise barriers construction project	8,067,827
Informatization construction project	4,045,337
Alteration project for overpass of Luqu Interchange-Mashan Expressway	9,624,657
Setting up of billboards	4,129,754
Other construction and facilities in progress	77,086,772
Total	7,839,417,119

Capital structure and solvency

2018 CAPEX will be similar to 2017 levels.

Capital expenditure item	Amount (RMB'00 million)
Investment in the construction of Zhendan Expressway	5.5
Investment in the construction of Wufengshan Toll Bridge	31
Investment in the construction of Changyi Expressway Phase I	12
Investment in the construction of Yichang Expressway	8
Equity investment in Suzhou Industrial Park CDB Kai Yuan Investment Center Phase II (Limited Partnership)	6
Repurchase of the 30% equity interest in Hanwei Company	1.845
Monitoring, toll collecting, communication and lighting facilities and equipment and system construction	1.39
Modification of housing and building structures	3.38
Other fixed assets and equipment	1.24

Another growth component is the higher number of cars.

At the end of the Reporting Period, a total of 16,195,000 vehicles for civilian use were owned in the Jiangsu Province, representing a net increase of 1,840,000 vehicles, and representing an increase of 12.9% as compared to that at the end of the previous year; a total of 14,082,000 private cars were owned as at the end of the Reporting Period, representing a net increase of 1,560,000 vehicles, and representing an increase of 12.5% as compared to that at the end of the previous year, of which 9,876,000 private sedans were owned, representing a net increase of 955,000 vehicles, and representing an increase of 10.7% as compared to that at the end of the previous year (data source: governmental statistics information website).

The revenue contributors are clearly explained in their annual report where the biggest one is the Shanghai – Nanjing expressway that contributes to 51% of revenue.

Comparison of the data of average daily traffic volume and toll revenue

Project		2017		2016		Year-on-year %
Shanghai-Nanjing Expressway	Traffic volume of passenger vehicles (vehicle/day)	70,848	78.20%	65,270	78.04%	8.55%
	Traffic volume of trucks (vehicle/day)	19,756	21.80%	18,361	21.96%	7.60%
	Total traffic volume (vehicle/day)	90,603	-	83,631	-	8.34%
	Average daily toll revenue (RMB'000/day)	13,162.67	-	12,493.67	-	5.35%
Nanjing-Lianyungang Highway	Traffic volume of passenger vehicles (vehicle/day)	3,637	63.56%	3,572	72.15%	1.83%
	Traffic volume of trucks (vehicle/day)	2,085	36.44%	1,379	27.85%	51.23%
	Total traffic volume (vehicle/day)	5,723	-	4,951	-	15.59%
	Average daily toll revenue (RMB'000/day)	90.97	-	68.20	-	33.39%
Xicheng Expressway	Traffic volume of passenger vehicles (vehicle/day)	61,118	79.55%	56,299	78.70%	8.56%
	Traffic volume of trucks (vehicle/day)	15,713	20.45%	15,236	21.30%	3.13%
	Total traffic volume (vehicle/day)	76,831	-	71,535	-	7.40%
	Average daily toll revenue (RMB'000/day)	1,582.53	-	1,493.94	-	5.93%
Guangjing Expressway	Traffic volume of passenger vehicles (vehicle/day)	53,628	78.93%	50,826	77.23%	5.51%
	Traffic volume of trucks (vehicle/day)	14,319	21.07%	14,985	22.77%	-4.45%
	Total traffic volume (vehicle/day)	67,946	-	65,811	-	3.24%
	Average daily toll revenue (RMB'000/day)	794.27	-	797.66	-	-0.42%
Ningchang Expressway	Traffic volume of passenger vehicles (vehicle/day)	27,516	74.09%	23,533	74.92%	16.82%
	Traffic volume of trucks (vehicle/day)	9,625	25.91%	7,886	25.08%	22.04%
	Total traffic volume (vehicle/day)	37,140	-	31,440	-	18.13%
	Average daily toll revenue (RMB'000/day)	2,234.69	-	1,903.64	-	17.39%
Zhenli Expressway	Traffic volume of passenger vehicles (vehicle/day)	7,032	60.08%	6,418	63.43%	9.56%
	Traffic volume of trucks (vehicle/day)	4,672	39.92%	3,700	36.57%	26.28%
	Total traffic volume (vehicle/day)	11,704	-	10,118	-	15.67%
	Average daily toll revenue (RMB'000/day)	681.18	-	582.06	-	17.03%
Xiyi Expressway	Traffic volume of passenger vehicles (vehicle/day)	17,224	82.46%	15,952	83.23%	7.97%
	Traffic volume of trucks (vehicle/day)	3,664	17.54%	3,213	16.77%	14.03%
	Total traffic volume (vehicle/day)	20,888	-	19,166	-	8.99%
	Average daily toll revenue (RMB'000/day)	831.54	-	763.31	-	8.94%
Wuxi Huantaihu Expressway	Traffic volume of passenger vehicles (vehicle/day)	6,458	83.18%	6,383	85.48%	1.18%
	Traffic volume of trucks (vehicle/day)	1,306	16.82%	1,085	14.52%	20.41%
	Total traffic volume (vehicle/day)	7,764	-	7,468	-	3.97%
	Average daily toll revenue (RMB'000/day)	86.15	-	73.63	-	17.00%

Jiangsu Expressway company risks

We have to keep in mind that this is a state-owned company so not everything they do will be logical from a straightforward economic perspective and therefore this has to be accounted for.

Ancillary business is something I don't like:

Firstly, the principal business was further scaled up. The Company capitalized on the development opportunity to continue with the integration of quality road and bridge projects in the expressway network in southern Jiangsu. Meanwhile, it devoted energetic efforts to become the provincial-level capital contributor to the construction of the Wufengshan Toll Bridge and North-South Approach Expressways projects, thus further consolidating its leading position in the expressway network in southern Jiangsu. Given the prominent geographical advantages of Wufengshan project, investment in this project was of considerable strategic significance and economic value for the development of the Group's principal business. Secondly, more efforts were put into the development of ancillary businesses. The Company increased the registered capital of Ninghu Investment by RMB900,000,000 and tentatively set footprints in the areas such as finance, quasi-finance and emerging industries through equity investment. In the Reporting Period, Ninghu Investment participated in the subscription for CDB Kai Yuan Phase II Fund, which broadened its investment horizon, improved its investment capability and expanded its project categories for the future business transformation and development of the Company through exchanging ideas and cooperating with the well-known domestic investment institutions. Luode Fund Company took the opportunity to scale up and completed the establishment of real estate investment parent fund. It has issued a total of 4 real estate funds, with management scale of RMB800 million, of

Additionally, they are also building real estate which makes this a complex case. This is where the 2 billion in inventory on the balance sheet comes from real estate development investments.

Further, they invest in wealth management products with interest rates of around 3% while their short term loans have interest rates of around 4%.

Name of trustee	Type of entrusted wealth management	Amount of entrusted wealth management	Beginning date of entrusted wealth management	Termination date of entrusted wealth management	Capital source	Usage of funds	Method for determination of returns	Annualized rate of returns	Estimated returns (if any)	Actual gains or losses	Actual recovery	Through a legal procedure or not	Whether there is a future entrusted wealth management plan	Amount of provision for the impairment (if any)
Ping An Bank	Excellence Plan for Rolling Capital Guaranteed RMB-denominated Corporate Wealth Management Product of Ping An Bank (平安银行卓越滚动型保本人民币理财产品)	251,000,000	28 February 2017	7 March 2017	Internal funds	Bonds and money market instruments with higher credit rating and liquidity in inter-bank market	Capital preservation	3.20%	-	154,038	251,000,000	Yes	Uncertainty	-
Bank of Communications	*Yuntong Wealth Daily Increase (Type S) (通融财富日增利(S类))	210,000,000	30 June 2017	14 July 2017	Internal funds	Bonds and money market instruments with higher liquidity and investment grades	Capital preservation	2.85%	-	229,582	210,000,000	Yes	Uncertainty	-
China Merchants Bank	Structured deposit	250,000,000	28 June 2017	12 July 2017	Internal funds	Two-level products linked to gold of China Merchants Bank, their related target was the gold price published by The London Bullion Market Association every afternoon	Capital preservation	3.64%	-	349,041	250,000,000	Yes	Uncertainty	-
China CITIC Bank	CITIC Wealth - Win-Win Principal-Guaranteed "Bu Bu Gao Sheng" Type B RMB Wealth Management Product (中信理财之共赢保本步步高升的人民币理财产品)	497,000,000	28 April 2017	10 May 2017	Internal funds	30-100% in money market assets and fixed revenue assets, and 0-70% in the non-standard credit assets and other assets	Capital preservation	the maximum of 2.70% (8-14 days)	-	441,173	497,000,000	Yes	Uncertainty	-
Agricultural Bank of China	*Renminbi wealth management product of Agricultural Bank of China (人民币理财产品)	36,500,000	30 September 2017	12 October 2017	Internal funds	20-60% in loan portfolios, 10-50% in cash assets through REPOs and inter-bank borrowings, 10-30% in interbank deposits and 10-20% in assets under wealth management financing	Capital preservation	2.25%	-	27,000	36,500,000	Yes	Uncertainty	-
China Merchants Bank	Structured deposit	200,000,000	27 December 2017	3 January 2018	Internal funds	Two-level products linked to gold of China Merchants Bank, their related target was the gold price published by The London Bullion Market Association every afternoon	Capital preservation	4.00%	161,863	-	-	Yes	Uncertainty	-

They do that with 2.3 billion. While their short term loans have higher rates:

Short-term borrowings

(1) Categories of short-term borrowings

Unit: RMB

Item	Closing balance	Opening balance
Bank loans	1,593,000,000	630,000,000
Including: Unsecured loans	1,389,000,000	450,000,000
Entrusted loans (Note 1)	204,000,000	180,000,000
Non-bank financial institutions loans	1,270,000,000	140,000,000
Including: Unsecured loans	300,000,000	–
Entrusted loans (Note 2)	970,000,000	140,000,000
Total	2,863,000,000	770,000,000

Note1: Entrusted bank loans are provided by Jiangsu Far East Shipping Co., Ltd. ("Far East Shipping Company") through China CITIC Bank on 15 August 2017, for which the principal amount is RMB160,000,000, annual interest rate 4.35%, and duration period 1 year; and provided by Ninghu Investment through SPDB on 26 June 2017 and 1 August 2017 respectively, for which the principal amounts are RMB18,000,000 and 26,000,000, annual interest rate 4.35% and duration period 1 year.

Note2: Entrusted loans from financial institutions other than banks are provided by Ningchang Zhenli Company, the subsidiary of the Group through Group Finance Company as at 23 January 2017, 23 February 2017, 28 March 2017, 27 April 2017, 31 May 2017, 29 June 2017, 27 July 2017, 30 August 2017, 27 September 2017, 26 October 2017, 28 January 2017, 25 December 2017 respectively, for which the principal amounts are RMB60,000,000, RMB70,000,000, RMB80,000,000, RMB80,000,000, RMB70,000,000, RMB70,000,000, RMB70,000,000, RMB70,000,000, RMB70,000,000, RMB70,000,000, RMB70,000,000, RMB70,000,000, RMB190,000,000, and RMB70,000,000, annual interest rate 3.5% and duration period 1 year.

Jiangsu shareholder risk

BlackRock, JPMorgan are also invested and own 4% of the company. This for me represents a huge risk but also an opportunity for when the time comes. If BlackRock has to dispose of the stock due to increased pressure on funds withdrawals from their ETF or index funds, this tanks like a rock due to the shallowness of such a stock and emerging markets in general.

Shareholdings of top ten shareholders

Name of shareholder (full name)	Change during the Reporting Period	Number of shares held at the end of the Reporting Period	Percentage (%)	Number of shares with sales restrictions held	Shares pledged or frozen		Type of shareholder
					Status of shares	Number	
Jiangsu Communications Holding Company Limited	-	2,742,578,825	54.44	-	Nil	-	State-owned legal person
China Merchants Expressway Network & Technology Holdings Co., Ltd.	-	589,059,077	11.69	-	Nil	-	State-owned legal person
Commonwealth Bank of Australia	60,711,113	135,607,300	2.69	-	Unknown	-	Foreign legal person
BlackRock, Inc.	-2,522,633	121,857,932	2.42	-	Unknown	-	Foreign legal person
JPMorgan Chase & Co.	-	82,901,847	1.65	-	Unknown	-	Foreign legal person
Guotai Junan Securities Company Limited	Unknown	55,982,255	1.11	-	Unknown	-	Others
Jiantou Zhongxin Asset Management Co., Ltd.	Unknown	21,410,000	0.42	-	Unknown	-	Others
China Life Insurance Company Limited (Taiwan) – Self-owned Funds	Unknown	20,680,954	0.41	-	Unknown	-	Foreign legal person
The National Social Security Fund 116 Composition	Unknown	9,773,895	0.19	-	Unknown	-	Others
Cathay Life Insurance Co., Ltd. – Self-owned Funds	Unknown	9,553,937	0.189	-	Unknown	-	Others

That is the opportunity for those who are patient and follow what is going on around the world. We have seen the dips in August of 2015 and January of 2016 and now as money is fleeing emerging markets and China especially due to trade war fears.

MAIN CONCERN – Concessions on toll roads expire

I have gone through the complete annual report and they don't disclose the concession periods per owned road. From the amortization numbers I can estimate what is the average concession period remaining on the used roads.

17. Intangible assets

(1) Intangible assets

nit: RMB

Item	Toll road operation rights	Land use rights	Software	Total
I. Total original carrying amount				
1. Opening carrying amount	30,004,046,991	1,744,161,676	56,991,807	31,805,200,474
2. Increase in the current year	77,624,657	-	2,497,635	80,122,292
(1) Purchase	-	-	526,800	526,800
(2) Transferred from construction in progress	77,624,657	-	1,970,835	79,595,492
3. Decrease in the current year	32,343,022	-	-	32,343,022
(1) Transferred to fix assets	32,343,022	-	-	32,343,022
4. Closing balance	<u>30,049,328,626</u>	1,744,161,676	59,489,442	31,852,979,744
II. Total accumulated amortization				
1. Opening carrying amount	9,378,258,572	1,089,185,755	12,976,971	10,480,421,298
2. Increase in the current year	1,120,570,597	64,658,223	11,800,275	1,197,029,095
(1) Amortization accrued	<u>1,120,570,597</u>	64,658,223	11,800,275	1,197,029,095
3. Decrease in the current year	4,850,400	-	-	4,850,400
(1) Transferred to fix assets	4,850,400	-	-	4,850,400
4. Closing balance	10,493,978,769	1,153,843,978	24,777,246	11,672,599,993
III. Total provision for impairment losses				
1. Opening carrying amount	-	-	-	-
2. Increase in the current year	217,737,524	-	-	217,737,524
3. Decrease in the current year	-	-	-	-
4. Closing carrying amount	217,737,524	-	-	217,737,524
IV. Total net book value of intangible assets				
Closing net book value	19,337,612,333	590,317,698	34,712,196	19,962,642,227
Opening net book value	20,625,788,419	654,975,921	44,014,836	21,324,779,176

From the above and amortization of 1.12 billion on an initial book value of 30 billion we can deduct that the concessions last on average 26 years. As 64% of the intangible value has not yet been amortized, the average concession period left is 16 years.

To dig deeper and check whether the calculations are correct we have to check the segment reporting per expressway on page 259 of the Annual Report. The Shanghai-Nanjing expressway has seen amortization of 600 million renminbi on prior year assets of 12 billion. 19 years exactly left on the biggest revenue contributor which is good. I will use 16 years as an average for my calculations to stay a bit conservative even if the latter years don't influence much the present value.

Growth projects estimations

The key is also what will be the profits on the new projects. I estimate the growth project investments currently planned to be around 16 billion that include Wufengshan Toll Bridge 64%, North-South Approach Expressway, Zhendan Expressway project 70%, Changyi Expressway project, Yichang Expressway. As the company owns about 67% of that on average we get to 10.72 billion. Given the average financing of 60% debt, 40% equity, let's say that the invested capital will be 5 billion and given the average ROE of 16%, if kept, we can expect 800 million in net profit from those companies in the future (back of a napkin calculation – didn't find exact calculations and NPV for the projects in the annual report)

GROWH PROJECTS	Investment
Wufengshan Toll Bridge 64%	7
North-South Approach Expressway	
Zhendan Expressway project 70%	6
Changyi Expressway project	1.4
Yichang Expressway	1
Total	15.4
ownership (back of a napkin)	10
net assets	4
ROA	16%

This will probably be there fore 25 years and also growing at 5% per year. Let's put this into an earnings model.

Jiangsu stock valuation

As always I use a 15% discount rate as that is my required rate of return, I assume 5% growth from traffic growth, inflation etc. I also assume a 16% ROE on the investments and a 16 year average concession on current operating assets. (model to be downloaded in excel)

CASH FLOW MODEL JIANGSU				
				16 years of current operations
				Growth per year 5%
				25years of new construction
				Return on net assets 16%
				Further long term potetial grow
CURRENT SITUATION				
in billions RMB	2018	2019	2020	2021
Earnings	3.7	3.885	4.07925	4.283213
Operating cash flow	4.8	5.04	5.292	5.5566
Number of shares	5	5	5	5
Share price	8.67			
Cash per share	0.96	1.008	1.0584	1.11132
PV (15% discount)	0.834782609	0.762193	0.695915	0.635401
SUM PV	7.360585053			

Adding the growth assets leads to a higher present value.

ROA	16%	2019	2020	2021	2022
net income		0.8	0.84	0.882	0.9261
PV (15% discount)		0.604915	0.552314	0.504286	0.460435
SUM PV	6.240908091				
TOTAL PV 15% discount	13.60149314				
Stock price	8.67				
Discount	36.26%				

So, the present value is a nice 13.6 while the stock price is 8.67. However, let's add the risks.

ADD RISKS		
Currency devaluation risk - present	15%	50% chance for 30% devaluation - debt crisis - Kyle Bass
Slowdown in China or global	10%	50% chance of an economic slowdowns in China and less growth
		Even if this is mitigated by the conservative 5% growth rate
Competition from trains, air	5%	Rail and air are taking market share year by year in travel
Slower future growth - from year 10	4%	no population growth in China might lower the 5% growth in the latter years
50% chance for the above		2% growth from 2022 onwards
BlackRock and JP Morgan	20%	100% certain of market sentiment shocks in time
	54%	
BUY RANGE	7.34481	
Discount (overvalued)	-15.28%	

I haven't added the potentially stupid investments these guys can make like the once they are doing but you get the point.

Conclusion

I would love to find such a business with unlimited assets, then we are talking something, as they say in Italy, chi cerca trova, I am sure I'll find something like that. However, this all doesn't mean this is a bad investment, it only means this can get cheaper and there could be a higher return with a margin of safety. Triggers can be a general debt scare in China, put two Bloomberg articles and there you go, and all the other things that can hit such a stock.

I must say I like the business model so I will compare this to all the other investment opportunities but also look at airports and all other investments in China. Check my [STOCK MARKET RESEARCH PLATFORM](#) for more similar analyses. My next step is to analyse all the other stocks on the toll road list, perhaps I find something better and cheaper out there as JPMorgan also prefers another stock while my hedge fund friend a thing one. Best to have all the earnings models and you know well then. However, this will also give a good balance to my only growth two investments in the Chinese portfolio for now.

The bridge almost built:

https://www.youtube.com/watch?v=49rn7U_wLR8